

Abstract

The objective of this Diploma thesis is study of diversity of Late Cretaceous bryophytes, fungi and algae from selected localities of the Bohemian Massif and James Ross Island. The focus of the study is the most precise taxonomy assessment of the found fossils and comparison of their diversity in selected localities from the Northern and the Southern hemispheres. The greatest emphasis is focused on bryophytes, but algae and fungi are mentioned as well. There are described two species of fungi, compared to recent genera *Passalora* and *Stomiopeltis*, one species of algae assigned to *Phycopeltis*, two species of liverworts assigned to *Ricciopsis*, one species of incertae sedis and two species of mosses assigned to *Muscites* and *Livingstonites* from the Bohemian Massif. Additionally, from James Ross Island there are three species of mosses described and assigned to *Muscites* and *Livingstonites*.